Catalogue no. 89-637-X — No. 001
ISSN 1710-0224
ISBN 978-1-11582-5

Analytical Paper

Aboriginal Peoples Survey, 2006: School Experiences of Off-Reserve First Nations Children Aged 6 to 14

by Evelyne Bougie

Social and Aboriginal Statistics Division
Jean Talon Building, 7th Floor, 170 Tunney's Pasture Driveway
Ottawa, Ontario K1A 0T6

Statistics Canada Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website at www.statcan.gc.ca or contact us by e-mail at infostats@statcan.gc.ca or by telephone from 8:30 a.m. to 4:30 p.m. Monday to Friday:

Statistics Canada national contact centre
Toll-free telephone (Canada and the United States):

Inquiries line	1-800-263-1136
National telecommunications device for the hearing impaired	1-800-363-7629
Fax line	1-877-287-4369
Depository services program inquiries line	1-800-753-7943
Depository services program fax line	1-800-565-7757

Local or international calls:

Inquiries line	1-613-951-8116
Fax line	1-613-951-0581

Information to access the product

This product, catalogue no. 89-637-X no. 001 is available for free in alternate format. To obtain a single issue, visit our website at www.statcan.gc.ca and select "Publications."

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca "About us" > "Providing services to Canadians."

Statistics Canada
Social and Aboriginal Statistics Division

Aboriginal Peoples Survey, 2006: School Experiences of Off-Reserve First Nations Children Aged 6 to 14

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2009

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

January 2009

Catalogue no. 89-637-X no. 001

ISSN 1710-0224

ISBN 978-1-100-11582-5

Frequency: Occasional

Ottawa

La version française de cette publication est disponible sur demande (nº 89-637-X nº 001 au catalogue).

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Symbols

The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published

Acknowledgements

Statistics Canada would like to express appreciation for those who took time to answer the 2006 Aboriginal Peoples Survey (APS) and to acknowledge the collaborative partnership of the Implementation Committee for the APS. The author of this paper would like to express appreciation to internal and external reviewers (through Work in Progress agreements) for providing comments and feedback on earlier versions of this report. Assistance provided by numerous people in the Social and Aboriginal Statistics Division and also from Social Survey Methods Division at Statistics Canada was also greatly appreciated.

Table of contents

About the Aboriginal Peoples Survey 7

What you should know about this study 8

Highlights 9

Introduction 11

The off-reserve First Nations population in Canada 13

School experiences among First Nations children living off reserve 14

- Perceived school achievement 14
- Absence from school 14
- Previous attendance at an early childhood development or preschool program 15
- Attendance at a before or after school child care program 15
- Perceived presence of drugs, alcohol, and/or violence at school 15
- Satisfaction with school practices 16
- Importance of high school graduation and postsecondary education 16
- Perceived social relationships at school 17

Factors likely to be associated with school achievement 17

- Family and household characteristics of off-reserve First Nations children 17
  - Parental level of education 17
  - Household income 18
  - Living arrangements 19
  - Nutrition 19
  - Mobility in the previous year 20
  - Residential school attendance of parents 20
- Activities of daily living and health conditions among off-reserve First Nations children 22
  - Activity limitations at school 22
  - Diagnosed long-term conditions or health problems 22
- Out-of-school activities of off-reserve First Nations children 24
  - Reading books 24
  - Activities outside of school 25
- Knowledge of Aboriginal languages among off-reserve First Nations children 26
  - Ability to speak and understand an Aboriginal language 26
  - Aboriginal language use 27

Which factors are associated with off-reserve First Nations children's perceived school achievement? 28

- Factors associated with higher perceived achievement at school 31
- Factors associated with lower perceived achievement at school 31
- Limitations 32

Conclusion 33

Registered Indian Status 34

References 39

About the Aboriginal Peoples Survey

The Aboriginal Peoples Survey (APS) provides an extensive set of data about Métis, Inuit, and off-reserve First Nations adults 15 years and over and children 6 to 14, living in urban, rural, and northern locations across Canada. The Aboriginal People Survey was designed to provide a picture of the lifestyles and living conditions of Métis, Inuit, and off-reserve First Nations peoples in Canada.

The survey was developed by Statistics Canada in partnership with the following national Aboriginal organizations: Congress of Aboriginal Peoples; Inuit Tapiriit Kanatami; Métis National Council; National Association of Friendship Centres; and the Native Women's Association of Canada. The following federal departments sponsored the 2006 APS: Indian and Northern Affairs Canada, Health Canada, Human Resources and Social Development Canada, Canadian Mortgage and Housing Corporation and Canadian Heritage.

The Aboriginal People Survey is a post-censal survey, that is, a sample of about 60,000 people was selected from adults 15 years and over and children aged 6 to 14 living in private households whose response(s) on their 2006 Census questionnaire indicated that they:

- had Aboriginal origins and/or
- identified as North American Indian, Métis and/or Inuit, and/or
- had treaty or registered Indian status and/or
- had Indian Band membership.

Respondents self-identified as "North American Indian"; however, the term "First Nations" will be used throughout this report.

Aboriginal people living in Indian settlements and reserves in the 10 provinces were not included in the 2006 APS data collection. In the three territories, all First Nations people were included in the APS target population. Discussions are underway with stakeholders to determine how best to collect data with First Nations communities. Further discussions need to take place with federal partners and First Nations leadership. Therefore, findings from the Aboriginal Peoples Survey are not representative of all First Nations people living in Canada; however, they are representative of First Nations people (6 years and over) living off-reserve in the ten provinces and all First Nations people (6 years and over) in the territories.

The Aboriginal People Survey was conducted between October 2006 and March 2007. Personal interviews were conducted in Inuit communities, the Northwest Territories (except for Yellowknife) and in other remote areas, while telephone interviews were conducted elsewhere. The overall response rate for the APS was 80.1%. More detailed information about the survey is available in the "Aboriginal People Survey Concepts and Methods Guide" (catalogue number 89-637-X).

What you should know about this study

The main data source used in this report is the Aboriginal Peoples Survey 2006, Children and Youth (6 to 14) component. The Aboriginal People Survey on Children and Youth is a survey which collects data about the child from their parent/guardian. In the majority of cases, this person was a parent of the child, but could also be a grandparent, a foster parent, or other relative. To facilitate readability, the term "parent" will be used throughout the report when referring to the person who responded on behalf of the child.

It is important to note that the findings in this report are based on the perceptions and reporting of the parent who responded on behalf of their child.

The First Nations identity definition was used in this publication. The focus of this report is children aged 6 to 14 who have been identified as First Nations by their parent, either as a single response or in combination with Métis and/or Inuit identity. This population includes both children with and without Registered Indian status (see Textbox: Registered Indian Status). This report includes First Nations children who were living off reserve[1], regardless of where their school is located.

The 2006 Aboriginal People Survey asked parents whether their child was currently attending school. The vast majority (98%) of First Nations children living off reserve were reported to be currently attending school. Most of the children who were reported to not be attending school, were home schooled. This report focuses on information provided by parents of approximately 6,222 off-reserve First Nations children aged 6 to 14 (representing 96,400 children) who were attending formal schools in 2006/2007.

Throughout this report, percentages reported may not add to 100 because missing data (i.e., don't know, refusal, not stated) were included in the calculation of all estimates. In most cases, the proportions of missing data were extremely small, and therefore were generally not reported. Where there are larger percentages of missing data, these are shown in the text.

In the text of the report, comparative statements are made only where differences were statistically significant at the 5% level.

There are some instances where Census data are used in this report. In these cases, the single response First Nations identity population is used. A very small percentage of First Nations people (about 1%) identified as belonging to more than one Aboriginal group on the 2006 Census. Census counts have been used to describe the number of First Nations children living off reserve rather than the counts from the APS survey for consistency with previously released Census data. In this report, all First Nations children in the three territories were included in Census estimates for consistency with the APS target population. Please refer to chapter 10 of the "Aboriginal People Survey Concepts and Methods Guide" for a detailed explanation of the relationship between the Aboriginal People Survey and the Census (catalogue number 89-637-X).

1. First Nations children living in Indian settlements and reserves in the 10 provinces were not included in the 2006 Aboriginal People Survey data collection. In the three territories, all First Nations children were included in the Aboriginal People Survey target population.

Highlights

- The Aboriginal People Survey asked parents to rate how well their child was doing at school this year, based on their knowledge of their child's school work. In 2006, 70% of off-reserve First Nations children aged 6 to 14 were reported by their parents to be doing "very well" or "well" in school. About one quarter (24%) were reported to be doing "average", and 5% "poorly" or "very poorly", in school.

- Among off-reserve First Nations children, girls were more likely to be reported by their parents as doing "very well" or "well" in school than boys (75% for girls and 65% for boys, respectively). As well, younger children (aged 6 to 10) were more likely than older children (aged 11 to 14) to be reported as doing "very well" or "well" at school (74% and 64% respectively).

- Similar perceptions of how children were doing at school were found for all children aged 6 to 14 in Canada. According to the National Longitudinal Survey of Children and Youth (2000/2001), about 67% of all children in Canada were reported by their parents to be doing "very well" or "well" in school. About 24% were reported to be doing "average", and 4% "poorly" or "very poorly", in school.

- The majority of off-reserve First Nations children had parents who were generally satisfied with their child's school practices. For instance, most First Nations children had parents who agreed or strongly agreed that their child's school provided enough information on their academic progress (92%), attendance (95%), and behaviour (91%).

- Parents of off-reserve First Nations children believe in the importance of education. While almost all First Nations children (97%) had parents who indicated that it was "very important" that their child graduates from high school, about 86% had parents who indicated that it was "very important" that their child obtains postsecondary education.

- About 12% of off-reserve First Nations children had parents (one or both) who indicated that they had been residential school students. Off-reserve First Nations children with registered Indian status were more likely to have parents who had been residential school students (17%) than their non-status counterparts (3%).

- Off-reserve First Nations boys were twice as likely as girls (18% versus 9%) to have been diagnosed with a learning disability. Off-reserve First Nations boys were also more than twice as likely as girls (13% versus 5%) to have been diagnosed with Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder (ADD/ADHD).

- Sports were the most popular out-of-school activity among off-reserve First Nations children, as more than one-fifth (21%) participated in sports 4 or more times per week. Spending time with Elders ranked second at 14%, followed by taking part in art or music activities at 9%. Off-reserve First Nations boys participated in sports more often than girls, whereas girls took part in art or music activities more often than boys.

- About 17% of off-reserve First Nations children were reported to be able to speak and understand an Aboriginal language. About 31% were able to understand (even if only a few words), but not speak, an Aboriginal language. Half (50%) of off-reserve First Nations children could neither speak nor understand an Aboriginal language. Off-reserve First Nations children with registered Indian status were four times as likely as those without status to be able to speak and understand an Aboriginal language (24% versus 6%).

- According to 2006 Census data, 50% of off-reserve First Nations children were living in a two-parent household, while 40% were living in a one-parent household. About 3% were living with grandparents (with no parent present), and about 6% were living with other relatives. In comparison, 78% of all children aged 6 to 14 in Canada were living in a two-parent household, 20% were living in a one-parent household, 1% with grandparents, and 1% with other relatives.

- A number of factors were associated with relatively higher perceived achievement at school among off-reserve First Nations children, after holding constant other factors. These were:

    - Getting along well with teachers, or with friends and classmates;
    - Having parents who were satisfied with school practices (such as providing information on the child's academic progress, attendance and behaviour);
    - Reading books everyday;
    - Playing sports at least once a week, or taking part in art or music activities at least once a week;
    - Living in a family in the highest household income quintile.

- A number of factors were associated with relatively lower perceived achievement at school among off-reserve First Nations children, after holding constant other factors. These were:

    - Having missed school for a period of 2 or more weeks in a row during the school year;
    - Having been diagnosed with a learning disability or with attention deficit disorder;
    - Having parents who attended residential schools.

Introduction

Even though the educational profile of First Nations[2] peoples living off reserve in Canada has generally improved over the past decade, their rate of high school completion continues to be lower than the total Canadian population. According to the 2006 Census, 31% of the off-reserve First Nations population aged 25 to 64 did not have a high school diploma, compared to 15% of their counterparts in the total Canadian population. Individuals without a diploma or a degree from a high school, college, or university may face challenges in today's knowledge-based society as compared with those who have formal credentials. For instance, Hull (2000) has found that postsecondary educational attainment has positive influences on employment and earnings for Aboriginal peoples.

Many researchers (e.g., Astone and McLanahan, 1991; Ensminger and Slusarcick, 1992; Alexander, Entwistle, and Horsey, 1997; Garnier, Stein, and Jacobs, 1997) now describe the path toward dropping out of high school as a multifaceted and cumulative process, which begins as early as a child's very first years in school. Given that the practices, usages, and capacity regarding the collection of Aboriginal education data vary widely across jurisdictions, little national-level data exist regarding the early school performance and experiences of First Nations children who are living off reserve. The goal of this study is thus to present new data on the early school experiences among off-reserve First Nations children aged 6 to 14. This study also provides statistically-based insight into some of the factors likely to be associated with how well they are doing at school, as perceived by parents.

The educational data gathered in the 2006 Aboriginal People Survey (APS) do not cover the full spectrum of learning. These data are limited to learning that takes place in the formal education system in Canada. Although "Western" education and knowledge is important for First Nations children, it does not completely reflect the holistic, lifelong nature of learning as perceived and practiced by some First Nations peoples. For instance, important sources and domains of knowledge, such as the natural world, traditions, or ceremonies, and the more experiential type of learning or traditional educational activities that occur outside the classroom are not well measured in existing surveys (Canadian Council on Learning, 2007).

The 2006 Aboriginal People Survey does provide some information on how well off-reserve First Nations children are doing in the formal education system, as perceived and reported by their parents. In addition, the survey provides insights into experiences outside of school which can have an impact on their school outcomes. Indeed, the APS provides a variety of information on children's experiences during the elementary school years, as well as during the early high school years, both inside and outside the classroom. Taken together, these data allow researchers to paint a portrait of one of the many "ways of knowing" (Canadian Council on Learning, 2007) which contributes to the overall well-being of First Nations children living off reserve.

Factors likely to be associated with school achievement

This report explores the question: What are the school experiences among First Nations children aged 6 to 14 living off reserve, as perceived and reported by their parents?

There is little research that addresses the issue of school dropout or school achievement as it specifically relates to Aboriginal peoples in Canada (see Brady, 1996). However, research based on the general population has shown that school achievement is influenced by a wide variety of factors associated with students, their families, the schools that they attend, and their communities (Rumberger, 1995; Garnier, Stein, and Jacobs, 1997; Lee and Burkham, 2003). Moreover, the various factors that may influence school achievement are likely to act in concert rather than independently (Lee and Burkham, 2003). For this reason, the following factors which research has shown to be generally associated with school achievement are investigated in this report:

2. In the Census and the Aboriginal People Survey, people identified as "North American Indian"; however, the term "First Nations" will be used throughout this report.

School experiences
- How well children are doing in school
- Absence from school
- Previous attendance at an early childhood development program
- Attendance at a before/after school child care program
- Parents' satisfaction with their child's school
- Parents' views on the importance of graduating from high school, and the importance of getting postsecondary education
- Parents' perceptions of how well their children are getting along with their classmates and their teachers

Family and household characteristics
- Parents' level of education
- Household income
- Living arrangements
- Nutrition
- Mobility

Activities of daily living and conditions
- Activity limitations at school
- Rates of long-term, diagnosed conditions, including learning disabilities and attention deficit disorder

Out-of-school activities
- Reading books
- Playing sports, taking part in art or music activities, participating in clubs or groups, volunteering, and spending time with Elders

Aboriginal language knowledge[3]
- Ability to understand and speak an Aboriginal language

All of these factors are examined by sex, age group (children aged 6 to 10 versus children aged 11 to 14)[4], region (Atlantic[5], Quebec, Ontario, the Prairies[6], British Columbia, and the Territories[7]), and area of residence (urban versus rural)[8]. In the text of the report, comparative statements are made only where differences were statistically significant at the 5% level.

Each factor was also examined as a potential predictor of how well children were doing in school through logistic regression analysis. This analysis, described in the last section of this report, addresses a final and important question: "Which factors are associated with off-reserve First Nations children's perceived school achievement?"

3. Some authors suggest that learning, acquiring, and demonstrating fluency in an Aboriginal language may contribute to positive self-esteem (Canadian Heritage, 2005; Norris, 2007). It is through its relationship with self-esteem that fluency in an Aboriginal language is thought to be associated with school achievement (see Bougie, Wright, and Taylor, 2003).
4. Throughout this report, "younger children" refers to those aged 6 to 10, and "older children" to those aged 11 to 14.
5. Includes Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick.
6. Includes Manitoba, Saskatchewan, and Alberta.
7. Includes Yukon, Northwest Territories, and a small number of First Nations children in Nunavut.
8. An urban area is defined as an area with a population of at least 1,000 and no fewer than 400 persons per square kilometre. Rural areas include all territory lying outside urban areas. The number of First Nations children living in Inuit Nunaat (Inuit homeland) was too small to be analyzed.

The off-reserve First Nations population in Canada

The off-reserve First Nations population in Canada is young and growing. The Census shows that in 2006, the median age[9] of the off-reserve First Nations population was 26 years, 13 years below the median age of 39 years for the total Canadian population. (The median age is the point where exactly one-half of the population is older, and the other half is younger.) Between 1996 and 2006, the off-reserve First Nations population grew by 35%, nearly four times faster than the 9% rate of increase for the total Canadian population.

According to the 2006 Census, there were 78,325 First Nations children aged 6 to 14 living off reserve in Canada. These children made up about 2% of all Canadian children aged 6 to 14.

In some areas of Canada, off-reserve First Nations children aged 6 to 14 represent a significant proportion of the total population for this age group, and in other areas, they are a minority. For example, 39% of children aged 6 to 14 in the Northwest Territories and 29% in the Yukon is a First Nations person. In Saskatchewan and Manitoba, 9% and 7%, respectively, are First Nations children living off reserve. In Ontario, which is the province with the largest count of off-reserve First Nations children between the ages of 6 to 14 (19,665), off-reserve First Nations children represent only 1% of the total population aged 6 to 14.

Not every individual who identifies as a First Nations person is a treaty or registered Indian. This may be because he or she, although a descendent of a registered Indian, is not entitled to be registered under the terms of the *Indian Act* (see textbox - Registered Indian Status). According to the 2006 Census, 68% of children between the ages of 6 to 14 living off reserve who were identified as First Nations children were also treaty or registered Indians (53,600 children). The remaining 32% were children without treaty or registered Indian status (24,720).

There are some differences in characteristics between off-reserve First Nations children with registered Indian status and those without registered Indian status. For example, according to the 2006 Census, higher percentages of off-reserve First Nations children aged 6 to 14 with registered Indian status had knowledge of an Aboriginal language, were living in low-income economic families, and were living in lone-parent families compared to off-reserve First Nations children without registered Indian status.

9. Median age data do not include those living in First Nations communities in the Yukon and the Northwest Territories.

School experiences among First Nations children living off reserve

Perceived school achievement

Research has demonstrated that a number of school-related experiences serve as important predictors of staying in or leaving school (Alexander, Entwistle, and Horsey, 1997; Garnier, Stein, and Jacobs, 1997; Lee and Burkham, 2003; Rumberger, 1995). Among such experiences, poor school achievement has been linked with a higher probability of leaving school.

The 2006 Aboriginal People Survey does not have any direct measures of educational achievement, such as students' grades in school. The Aboriginal People Survey did, however, ask parents to rate how well their child was doing in school this year, based on their knowledge of their child's school work, including report cards. According to these data, 43% of off-reserve First Nations children were reported to be doing "very well", and 27% were reported to be doing "well", at school. A little less than a quarter (24%) were reported to be doing "average", and 5% "poorly" or "very poorly", at school.

According to parents, First Nations girls were more likely than First Nations boys to be reported as doing "very well" or "well" at school (75% and 65% respectively). As well, younger children (aged 6 to 10) were more likely than older children (aged 11to 14) to be reported as doing "very well" or "well" at school (74% and 64% respectively).

Similar perceptions of how children were doing at school were found for all children aged 6 to 14 in Canada.[10] In the National Longitudinal Survey of Children and Youth, parents were asked to rate how well their child was doing overall at school this year. About 42% of all children in Canada were reported by their parents to be doing "very well", 25% "well", 24% "average", and 4% "poorly" or "very poorly", at school.

In the general Canadian population, girls were more likely than boys to be reported as doing "very well" or "well" at school (72% versus 62%), as were younger children (70% for children aged 6 to 10 versus 63% for children aged 11 to 14).

Absence from school

Absenteeism from school is another school-related experience which has been linked with a higher probability of leaving school (Alexander, Entwistle, and Horsey, 1997; Garnier, Stein, and Jacobs, 1997; Lee and Burkham, 2003; Rumberger, 1995).

The 2006 Aboriginal People Survey asked parents whether their child had been absent or missed school for a period of 2 or more weeks in a row during this school year. A small proportion (4%) of First Nations children living off reserve was reported to have experienced such absences from school. "Child was sick or injured" was the most common reason for an absence of at least 2 weeks.

10. Data from the National Longitudinal Survey of Children and Youth (NLSCY, Cycle 4, 2000/2001) were used. Comparable data for all children in Canada aged 6 to 14 are not available for 2006. The target population of the NLSCY comprises the non-institutionalized civilian population (aged 0 to 11 at the time of their selection) in Canada's 10 provinces, which, unlike the Aboriginal Peoples Survey, does not include children from the territories. The NLSCY excludes children living on Indian reserves or Crown lands, residents of institutions, full-time members of the Canadian Armed Forces, and residents of some remote regions.

Previous attendance at an early childhood development or preschool program

Attendance at a quality early childhood development program is often considered to facilitate a child's cognitive and social development, particularly among children from economically disadvantaged families (Palacio-Quintin, 2000; Cleveland and Krashinsky, 2003).

The 2006 Aboriginal People Survey asked parents if their child had attended an early childhood development or preschool program. About 43% of off-reserve First Nations children were reported to have attended such a program.[11] About 17% had attended a program specifically designed for Aboriginal children, such as Aboriginal Head Start. The remaining 36% did not attend a preschool program.

Younger children were more likely to have attended a preschool program specifically designed for Aboriginal children (20% for younger children versus 15% for older children).

Off-reserve First Nations children with registered Indian status were more likely to have attended a preschool program specifically designed for Aboriginal children.[12] That is, one quarter of off-reserve First Nations children with registered Indian status (25%) attended such a program, as compared with 6% of those without registered Indian status.

Finally, First Nations children living in the Territories were the most likely to have attended a preschool program specifically designed for Aboriginal children (39%), as compared to children from all other regions (Prairies: 22%; British Columbia: 19%; Quebec: 12%; Ontario: 10%; Atlantic region: 8%). This proportion was also higher in the Prairies as compared to Quebec, Ontario, and the Atlantic region.

Attendance at a before or after school child care program

The 2006 Aboriginal People Survey asked parents if their child was currently attending a before or after school child care program. One in ten (10%) off-reserve First Nations children was attending such a program.

As could be expected, younger children were three times as likely as older children (15% versus 5%) to attend a before or after school child care program. As well, First Nations children in urban settings were more likely than those in rural settings (12% versus 5%) to be attending such programs. Finally, the proportion of off-reserve First Nations children attending a before or after school child care program was higher in Quebec (16%) than in the Prairies (11%), the Atlantic region (8%), and Ontario (8%).

Perceived presence of drugs, alcohol, and/or violence at school

Research has shown that use of illicit drugs at any age increases the risk that a student will drop out of high school (Mensch and Kandel, 1988; as cited in Garnier, Stein, and Jacobs, 1997). The 2006 Aboriginal People Survey did not assess children's substance use. Parents were asked if they felt that the presence of drugs, alcohol, and/or violence were problems at their child's school.

About 12% of off-reserve First Nations children had parents who perceived (i.e., agreed or strongly agreed) that the presence of drugs and alcohol was a problem at their child's school[13]. More than one-fifth (21%) of children had parents who perceived that violence was a problem at their child's school[14].

11. Note that this question was asked for children over preschool age and that this does not capture information for children currently attending preschool programs.
12. Note that this could have been a preschool program located on or off reserve.
13. The missing data (don't know / refusal / not stated) rate for this question was 6%.
14. The missing data (don't know / refusal / not stated) rate for this question was 4%.

As could be expected, older children were more likely than younger children to have parents who agreed or strongly agreed that the presence of drugs and alcohol was a problem at their child's school (20% versus 4%). Similarly, older children were more likely than younger children to have parents who thought that violence was a problem at school (25% versus 18%).

Finally, more First Nations children living in rural (15%) than in urban (11%) areas had parents who thought that the presence of drugs and alcohol was a problem at school.

Satisfaction with school practices

Some authors suggest that certain characteristics and conditions in schools may promote or hinder students' achievement (Lee and Burkham, 2003). In this respect, school organization (i.e., rules, curriculum) and school climate (i.e., discipline); which are reflections of the policies and practices that go on in school; have been shown to influence students' achievement (Lee and Bryk, 1989; Lee and Smith, 1993). The 2006 Aboriginal People Survey did not directly measure children's school organization and climate. Parents rated how satisfied they were with a variety of school practices.

The majority of off-reserve First Nations children had parents who were generally satisfied with their child's school practices. Most First Nations children had parents who agreed or strongly agreed that their child's school provided enough information on their academic progress (92%), attendance (95%), and behaviour (91%). Most of these children also had parents who were satisfied with the level of discipline (agreed or strongly agreed: 85%), the quality of teaching (89%), and the availability of extracurricular activities[15] (74%) at their child's school. Parents were also satisfied with how their child's school was preparing him/her to make choices about the future[16] (83%). A majority of children had parents who agreed or strongly agreed that their child was challenged to work at his/her full potential (85%), and that their child's school had high academic standards[17] (80%).

Importance of high school graduation and postsecondary education

Parents' attitudes and values are often associated with their child's achievement at school. For example, parents' aspirations for their children's future and parents' expectations for their children's school performance have been found to influence school dropout rates (Rumberger, 1995; Alexander, Entwistle, and Horsey, 1997).

The 2006 Aboriginal People Survey asked parents whether it was important for them that their child graduates from high school, and gets more education after high school. According to these data, parents of off-reserve First Nations children strongly believe in the importance of education. While almost all First Nations children (97%) had parents who indicated that it was "very important" that their child graduates from high school, about 86% had parents who indicated that it was "very important" that their child obtains postsecondary education.

15. The missing data (don't know / refusal / not stated) rate for this question was 5%.
16. The missing data (don't know / refusal / not stated) rate for this question was 6%.
17. The missing data (don't know / refusal / not stated) rate for this question was 6%.

Perceived social relationships at school

Some research has shown that students who perceive positive teacher-student relationships at school are less likely to drop out (Lee and Burkham, 2003). Researchers like Croninger and Lee (2001) have shown that students who are disengaged with school report feeling unconnected with teachers.

The 2006 Aboriginal People Survey (APS) asked parents the extent to which their child was getting along with their friends and classmates, as well as with their teachers, since starting school in the fall. Generally speaking, off-reserve First Nations children were reported to have positive relationships with those they interacted with daily at school. About 81% were reported to have "hardly any or no problem" with friends and classmates, and about 85% were reported to have "hardly any or no problem" with teachers.

Girls were more likely than boys to be reported to get along well with their friends and classmates ("hardly any or no problem": 83% for girls versus 79% for boys). Girls were also more likely than boys to be reported to get along well with their teachers ("hardly any or no problem": 89% versus 82%).

Younger children were more likely than older ones to be reported to get along well with their teachers ("hardly any or no problem": 89% versus 81%).

Factors likely to be associated with school achievement

Family and household characteristics of off-reserve First Nations children

Several family and household characteristics are well-known for their impact on school achievement (see Rumberger, 1995, for a review). Characteristics like parental education, household income, and household living arrangements (one- versus two-parent households) are well-known predictors of school achievement and dropout. In fact, other researchers, like Brady (1996), argue that the difficulties faced by many First Nations students may be better explained by low socio-economic background than any other factor.

Parental level of education

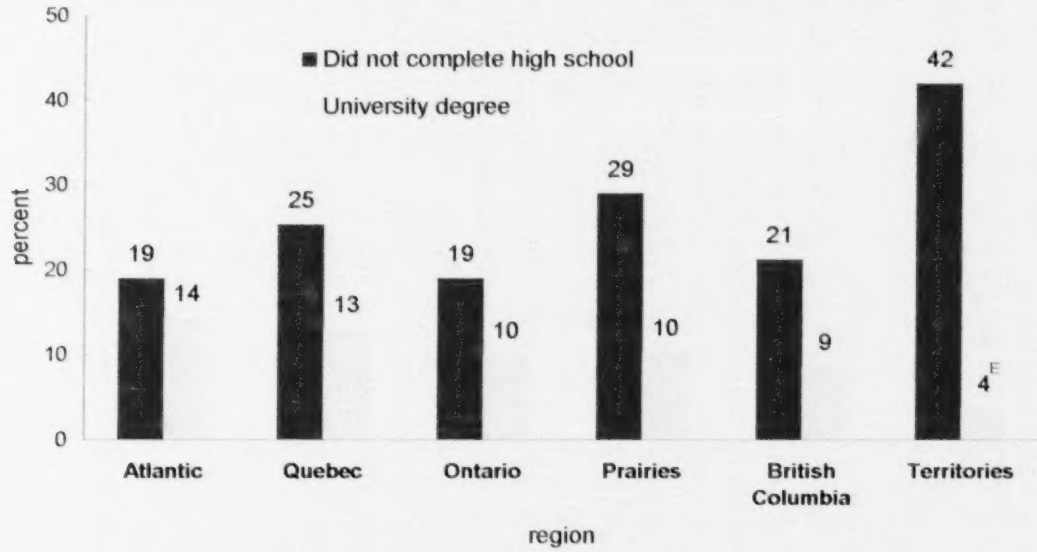
Generally speaking, the First Nations population living off reserve has a lower educational profile than the total Canadian population. Data from the 2006 Census show that 31% of the off-reserve First Nations population aged 25 to 64 did not have a high school diploma, compared to 15% of the total Canadian population. Also, 9% of the off-reserve First Nations population aged 25 to 64 had completed a university degree, compared to 23% of the total Canadian population.

The 2006 Aboriginal People Survey asked parents about the highest level of education they had ever completed. One quarter (25%) of off-reserve First Nations children had parents who had not completed high school, while approximately one-fifth (21%) had parents who had completed high school as their highest level of education. About 14% had parents with some postsecondary education, while about 29% had parents who had completed college or trade/vocational certificate or diploma. Finally, one-tenth (10%) of children had parents who had completed a university degree[18].

18. Highest level of education is for the parent answering the survey, not for the household.

Off-reserve First Nations children with registered Indian status were more likely to have parents who had not completed high school (29%) as compared to their non-status counterparts (18%). The highest proportion of First Nations children whose parents had less than high school education was found in the Territories (42%). The proportion of First Nations children whose parents had less than high school was also higher in the Prairies than in the Atlantic region, Ontario, and British Columbia (see chart 1).

Chart 1
Percentage of off-reserve First Nations children aged 6 to 14 who had parents who did not complete high school and with a university degree, by region, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

Household income

In general, Census data have shown that off-reserve First Nations people have lower income levels than the total Canadian population. In 2005, the median income[19] of First Nations people living off reserve was $17,464 as compared to $25,615 for the total Canadian population.

For the purpose of this report, the total household income of the off-reserve First Nations population aged 6 to 14 were ranked from lowest to highest and then divided into five groups of equal numbers of units, called quintiles.[20] In this report, households in the lowest quintile have a total average income of $22,943 or less. Households in the highest quintile have a total average income of $85,248 or more.

According to these data, off-reserve First Nations children living in urban areas were more likely to be in households at the lowest income group (22%) as compared with those living in rural areas (14%). They were also less likely to be in households at the highest income group (19%) than their rural counterparts (24%).

19. Income here refers to total income from all sources including employment income, income from government sources, pension income, investment income and any other money income received during the calendar year 2005 by persons 15 years of age and over. Median income is calculated for individuals with income. Median amounts are the income level that divides the population into two halves, i.e. half of this population receives less then this amount and half more. Median income data do not include those living in First Nations communities in the Yukon and the Northwest Territories.
20. The first quintile represents the 20% of households with approximately the lowest reported household income. The 2nd, 3rd, and 4th quintiles represent progressively higher levels of household income. The 5th quintile represents the 20% of households with the highest household income.

Off-reserve First Nations children with registered Indian status were more likely to be in households at the lowest income group (22%) as compared with their non-status counterparts (17%). They were also less likely to be in households at the highest income group (17% versus 25%).

Finally, First Nations children in the Territories were more likely to be living in families at the highest income group (33%) than First Nations children in all other regions (Ontario: 24%; Quebec: 20%; British Columbia: 20%; Atlantic: 17%; Prairies: 16%). Although households in the Territories may have relatively higher income, this is also an area with a relatively higher cost of living. For instance, there is indication that the food basket in this region is more expensive as compared to southern Canada (Indian and Northern Affairs Canada, 2008a). First Nations children in Ontario were more likely than their counterparts in the Prairies to be living in families at the highest income group.

Living arrangements

According to 2006 Census data, 50% of off-reserve First Nations children were living in a two-parent household, while 40% were living in a one-parent household. About 3% were living with grandparents (with no parent present), and about 6% were living with other relatives. In comparison, 78% of all children aged 6 to 14 in Canada were living in a two-parent household, 20% were living in a one-parent household, 1% with grandparents, and 1% with other relatives.

The proportion of First Nations children living in a one-parent household was higher in urban (45%) than in rural (27%) areas. As well, off-reserve First Nations children with registered Indian status were more likely to be living in a one-parent household (43%) than their non-status counterparts (36%).

Nutrition

Eating breakfast has many benefits for children, including providing energy for the morning's activities, helping them to get ready to learn, maintaining a healthy body weight, and helping them to feel good (Turcotte and Zhao, 2004). Research has also shown that inadequate nutrition; which may also come from experiencing food insecurity can have serious implications, including a decreased ability to concentrate and poor school performance (Wachs, 1995; as cited in Che and Chen, 2001).

The 2006 Aboriginal People Survey asked parents to indicate how often their child ate breakfast in the past week. A majority (80%) of off-reserve First Nations children were reported to eat breakfast "everyday". However, the APS did not ask where children ate breakfast; breakfast may have been provided at home, at school, or by a care-giver. Further, the Aboriginal People Survey did not inquire about the type of breakfast that was provided to children.

Younger children were more likely than older children to be reported to eat breakfast everyday (86% versus 72%). The proportion of First Nations children eating breakfast everyday was higher in Quebec (92%) than in all other regions (Ontario: 82%; Territories: 81%; Atlantic: 80%; British Columbia: 79%; Prairies: 76%). This proportion was also higher in Ontario than in the Prairie region.

The 2006 Aboriginal People Survey also asked parents if their child had ever experienced being hungry because the family had run out of food or money to buy food. A little more than one in ten (11%) off-reserve First Nations children were reported to have experienced such food insecurity. The proportion of First Nations children experiencing food insecurity was higher in urban (12%) than in rural (7%) areas.

For about 10% of First Nations children who experienced being hungry, this occurred every few months. For about half (49%) this occurred occasionally. For almost one-fifth (19%) this occurred on a regular monthly basis. And finally, about 12% of First Nations children experienced being hungry more than once a month[21].

21. The missing data (don't know / refusal / not stated) rate for this question was 10%.

Mobility in the previous year

Residential moves and transfers to different schools have been argued to be disruptive family events which can be related to dropping out of school (Alexander, Entwistle, and Horsey, 1997), especially for younger children (Haveman, Wolfe, and Spaulding, 1991; as cited in Alexander, Entwistle, and Horsey, 1997). Rumberger and Larson (1998) have found that students who drop out are more likely to have changed schools before or during high school.

Although the 2006 Aboriginal People Survey does not have information on residential moves or school transfers, the 2006 Census provides data on residential moves. According to these data, 76% of First Nations children living off reserve were residing at the same address as the year before. In comparison, 87% of all children aged 6 to 14 in Canada were residing at the same address as the year before.

Off-reserve First Nations children without registered Indian status were more likely to be living at the same address as the year before (80%) than those with registered Indian status (75%). Older First Nations children were also more likely to be living at the same address as the year before (79%) than their younger counterparts (74%).

Residential school attendance of parents

The residential school system operated across Canada between 1830 and the 1990s, peaking in 1931 when 80 residential schools were in operation. Residential schools were largely operated by churches in partnership with the federal government. The largest attendance of Aboriginal children at residential schools was in the West and the North (Aboriginal Healing Foundation, 2002).

It has been stated that, "in order to attend Residential Schools, Aboriginal children were removed from their homes, and often taken far from their families and communities. While at school, children were prevented from speaking their own languages and learning about their culture and heritage. It is not uncommon to hear some former students speak about the positive experiences in these institutions; however, many former students suffered physical and sexual abuse" (Indian and Northern Affairs Canada, 2008b).

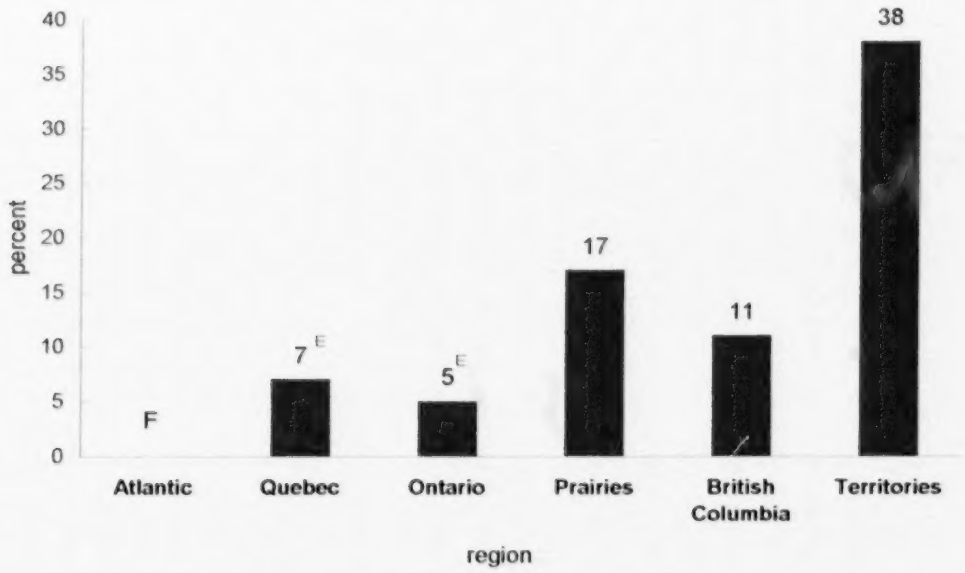
The last residential school for Aboriginal children in Canada closed in the 1990s but the impacts will affect many generations of First Nations peoples, their children and their communities (Where are the Children, 2008; Aboriginal Healing Foundation, 2002).

The 2006 Aboriginal People Survey asked parents if they, and their current spouse or partner, were ever students at a federal residential school or federal industrial school.[22] About 12% of off-reserve First Nations children had parents (one or both) who indicated that they had been residential school students[23].

22. The data shown in this report are for the parents/guardians of First Nations children between the ages of 6 to 14. As such, these data may not include older individuals whose generation was more likely to have attended residential school, given that residential schools stopped operating in the 1990s. Additionally, these data are for First Nations people living off reserve only (with the exception of the territories) and do not include people living in First Nations communities who attended residential school. Lastly, the parents/guardians may or may not be the birth parents of the child (for example, they may be adoptive parents or foster parents).
23. The missing data (don't know / refusal / not stated) rate for self was about 1%, and the rate for spouse was about 8%.

Off-reserve First Nations children with registered Indian status were more likely to have parents who had been residential school students (17%) than their non-status counterparts (3%). The Territories also had the largest proportion of First Nations children whose parents were residential school students at 38%, followed by the Prairies at 17% (see chart 2)[24].

Chart 2
Percentage of off-reserve First Nations children aged 6 to 14 whose parents were residential school students, by region, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

24. The residential school that the parents attended may not have been in the same region in which they lived during the time of the 2006 Aboriginal People Survey.

Activities of daily living and health conditions among off-reserve First Nations children

The 2006 Aboriginal People Survey asked parents if their child had a condition (physical or mental) or health problem that reduced the amount or the kind of activity they could do at school. Parents were also asked whether their child had been diagnosed by a doctor, nurse, or health professional with a long-term condition or health problem that had lasted or was expected to last 6 months or more.

Activity limitations at school

About 15% of off-reserve First Nations children were reported to have a condition or problem that impacted their participation in school activities.[25] First Nations boys were more likely than girls to have a condition that limited their school activities (19% versus 12%).

About 4% of all Canadian children aged 6 to 14 were reported to have a condition or problem that impacted their participation in school activities. Proportions for boys were higher (5%) than for girls (3%)[26].

Diagnosed long-term conditions or health problems

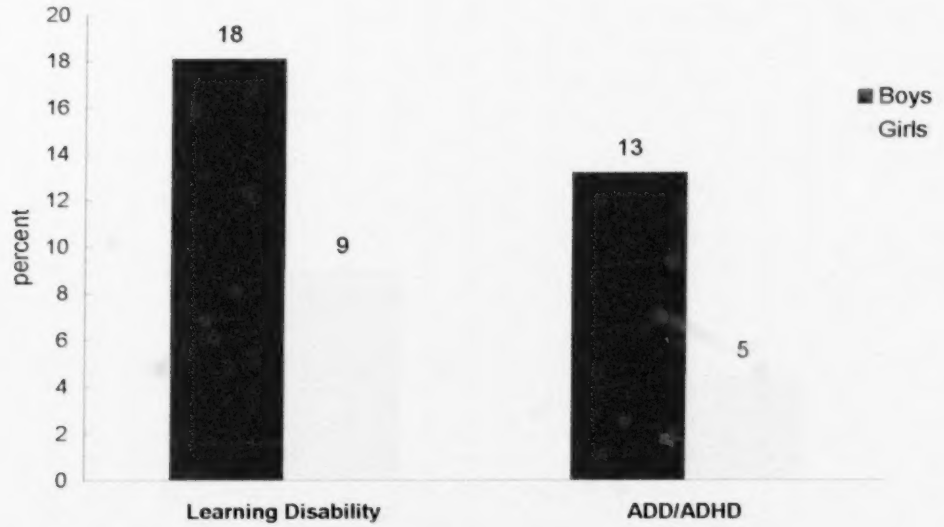
According to the 2006 Aboriginal People Survey, the most prevalent diagnosed condition among off-reserve First Nations children was allergies (18%). This was followed by asthma (14%), learning disability (14%), visual impairment (11%), Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder (ADD/ADHD, 9%), and ear infections or ear problems (9%).

Some research suggests that children who experience learning difficulties in school are at an increased risk for short-term and long-term behavioural and academic difficulties (Eccles, 1999). These children are more likely to repeat a grade and to drop out of high school (Alexander, Entwistle, and Horsey, 1997).

According to the 2006 Aboriginal People Survey, off-reserve First Nations boys were twice as likely (18% versus 9%) as girls to have been diagnosed with a learning disability. Off-reserve First Nations boys were also more than twice as likely (13% versus 5%) as girls to have been diagnosed with ADD/ADHD (see chart 3).

25. About 9% stated "yes, sometimes" and about 6% stated "yes, often" to the question on activity limitations at school, for a total rate of about 15%.
26. Data from the 2006 Participation and Activity Limitation Survey (PALS) were used. In PALS, parents were asked: "Does a physical condition or mental condition or health problem reduce the amount or the kind of activity your child can do: At work or at school?" Rates shown include both the "yes, sometimes" and "yes, often" response categories.

Chart 3
Rates of learning disability and Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder reported for off-reserve First Nations children aged 6 to 14, by sex, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

The gender difference in diagnosed learning disability and attention deficit disorder is a phenomenon that is also observed in the general population[27], and the reasons that boys would be more often identified or diagnosed with a learning disability and/or attention deficit disorder than girls are not fully understood (see Pastor and Reuben, 2008).

In the general population, about 3% of all Canadian children aged 6 to 14 were reported to have been diagnosed with a learning disability. Proportions for boys were higher (4%) than for girls (2%). About 2% of all Canadian children aged 6 to 14 were reported to have been diagnosed with ADD/ADHD. Proportions for boys were higher (2%) than for girls (1%)[28].

27. The 2006 Participation and Activity Limitation Survey (PALS) found that a significantly higher rate of disabilities was generally reported among 5 to 14 year old boys as compared to girls in the total Canadian population (Statistics Canada, 2008). Data from the 2004, 2005, and 2006 National Health Interview Survey (NHIS) in the United States also show that overall, boys aged 6 to 17 are more likely than girls to have each of the specific diagnoses of learning disability and ADHD, or both (Pastor and Reuben, 2008).
28. Data from the 2006 Participation and Activity Limitation Survey (PALS) were used. In PALS, parents were asked: "Has a teacher, doctor or other health professional ever said that ___ had a learning disability?", and "Does ___ have any of the following long-term conditions which have been diagnosed by a health professional? Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD)".

Out-of-school activities of off-reserve First Nations children

Reading books

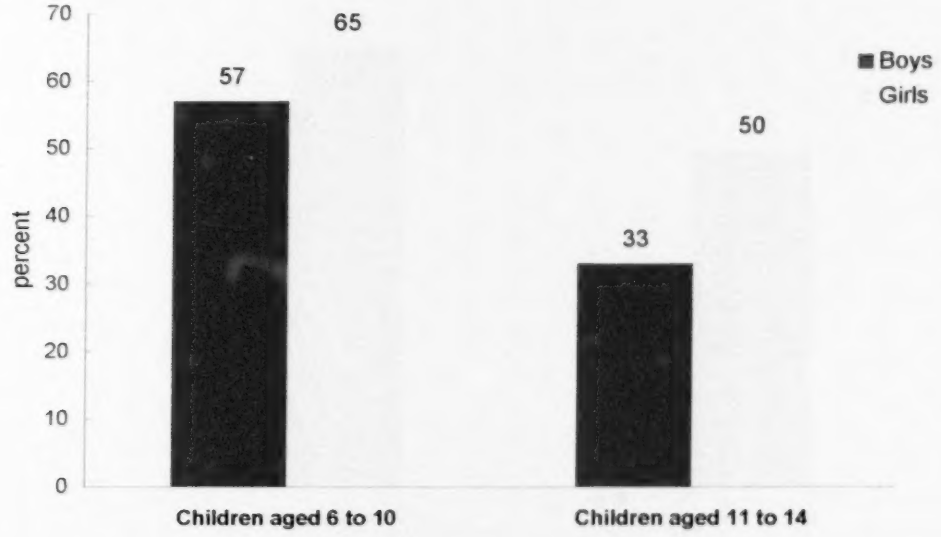
Research has shown that reading, or being read to, can have a positive influence on children's education outcomes, particularly their reading skills (Sénéchal and LeFevre, 2002; Cooks and Willms, 2002). Others have argued that reading books to children at home is one indication of parental involvement in schooling, which has been shown to be associated with better performance at school (Astone and McLanahan, 1991; Rumberger, 1995).

The 2006 Aboriginal People Survey asked parents how often their child read or had books read to them, excluding reading that was required for school. Over half (52%) of off-reserve First Nations children were reported to read books or to be read to "every day", and over a quarter (27%), "a few times a week". About 7% read or were read to "once a week", 5% "a few times a month", and 3% "less than once a month". Finally, 5% were reported to "never" read books.

Younger children were more likely than older children to be reported to read "everyday" (61% versus 41%). As well, girls were more likely than boys to be reported to read "everyday" (58% versus 46%).

The gap in reading frequency between First Nations boys and girls was more pronounced among older children (see chart 4)[29]. That is, there was an eight percentage point difference between 6 to 10 year-old boys and girls who were reported to read "everyday", compared with a seventeen percentage point difference between boys and girls aged 11 to 14.

Chart 4
Percentage of off-reserve First Nations children aged 6 to 14 reading books everyday, by sex and age groups, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

29. A logistic regression predicting the odds of reading 'everyday' showed a significant interaction effect involving sex and age group.

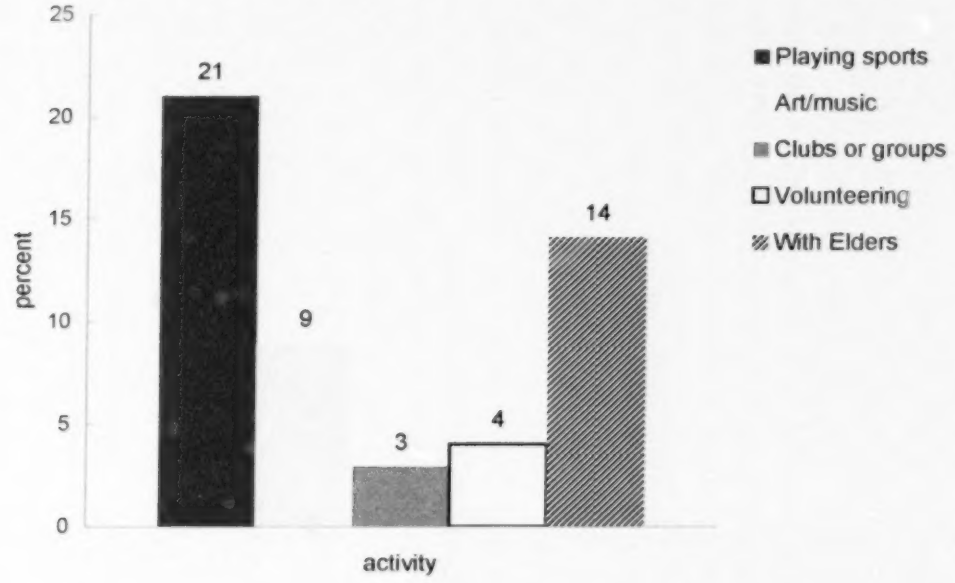
Activities outside of school

Out-of-school activities have been argued to play an important role in children's development, as those activities can either exacerbate or compensate for children's experiences at school (Eccles, 1999). Eccles suggests that success in a wide range of settings can help give a child a positive view of his or her competence, and a positive attitude toward learning. Furthermore, participation in extracurricular activities can create stronger social ties to the school, which in turn is associated with staying in school (McNeal, 1995). In this respect, authors like Bonneau, Ee, and Lauzon (2006) emphasize the value of participation in extracurricular activities in keeping First Nations students connected to school.

The 2006 Aboriginal People Survey asked parents to indicate how often their child spent time doing a number of activities outside of school hours, such as: playing sports, including taking lessons; taking part in art or music groups or lessons; taking part in clubs or groups such as youth groups, drum groups, dance groups; volunteering in the community or school; and spending time with Elders. The Aboriginal People Survey did not ask whether each of these activities were school-based or not.

Sports were the most popular activity among off-reserve First Nations children, as more than one-fifth (21%) participated in sports 4 or more times per week (see chart 5). Spending time with Elders ranked second at 14%, followed by taking part in art or music activities at 9%.

Chart 5
Percentage of off-reserve First Nations children aged 6 to 14 participating in various activities outside of school hours four or more times per week, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

Boys participated in sports more often than girls: 71% of boys versus 61% of girls played sports at least once a week. Girls were more likely than boys to take part in art or music activities (42% versus 32%) and participate in clubs or groups (37% versus 25%) at least once a week.

Younger off-reserve First Nations children were more likely to spend time with Elders than older children. That is, 42% of younger children spent time with Elders at least once a week, compared with 36% of older children. The proportion of First Nations children spending time with Elders at least once a week was higher in rural (46%) than in urban (37%) settings. This proportion was also higher in the Territories (54%) than in Ontario (40%), British Columbia (38%), and the Prairies (36%).

Finally, the proportions of First Nations children participating in clubs or groups at least once a week was lower in Quebec (17%) than in British Columbia (35%), Ontario (33%), the Atlantic region (31%), and the Prairies (31%).

Knowledge of Aboriginal languages among off-reserve First Nations children

For many First Nations people, Aboriginal languages are an important part of their identity. These languages reflect distinctive histories, cultures and identities linked to family, community, the land, and traditional knowledge (Norris, 2007).

Some authors suggest that learning, acquiring, and demonstrating fluency in an Aboriginal language may contribute to positive self-esteem and community well-being, as well as cultural continuity (Canadian Heritage, 2005; Chandler, 2006; Norris, 2007). It is through its impact on self-esteem that fluency in an Aboriginal language is, in turn, thought to be associated with school achievement (Bougie, Wright, and Taylor, 2003; Wright and Taylor, 1995).

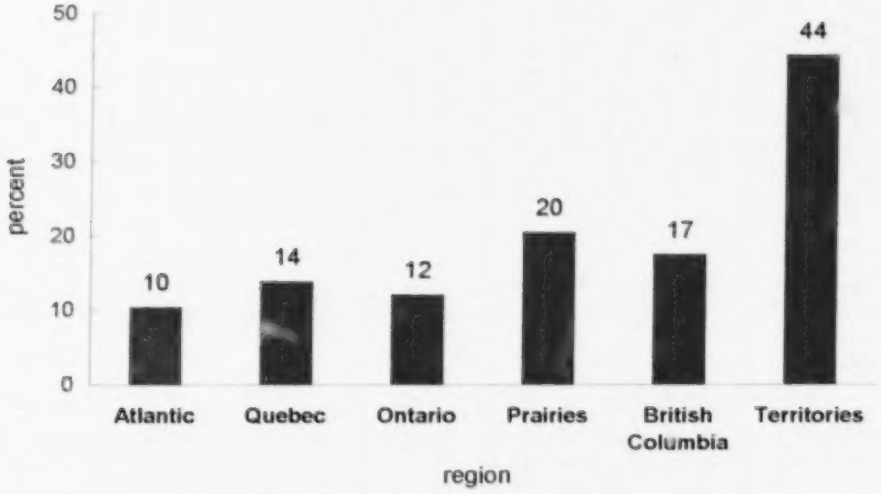
Ability to speak and understand an Aboriginal language

The 2006 Aboriginal People Survey asked parents whether their child was able to understand an Aboriginal language, even if only a few words. Parents were also asked whether their child was able to speak an Aboriginal language.

About 17% of off-reserve First Nations children were reported to be able to speak and understand an Aboriginal language. About 31% were reported to be able to understand (even if only a few words), but not speak, an Aboriginal language. Half (50%) of First Nations children could neither speak nor understand an Aboriginal language.

Off-reserve First Nations children with registered Indian status were four times as likely as those without registered Indian status to be able to speak and understand an Aboriginal language (24% versus 6%). First Nations children living in rural areas were more likely to be able to speak and understand an Aboriginal language (21%) as compared to their urban counterparts (16%). Finally, the Territories had the highest proportion of First Nations children who were able to speak and understand an Aboriginal language at 44%. This proportion was also higher in the Prairies than in the Atlantic region and Ontario (see chart 6).

Chart 6
Percentage of off-reserve First Nations children aged 6 to 14 able to speak and understand an Aboriginal language, by region, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

Aboriginal language use

For children who were able to speak and understand an Aboriginal language, their parents were asked the frequency with which their child was currently using it at home, and at school.

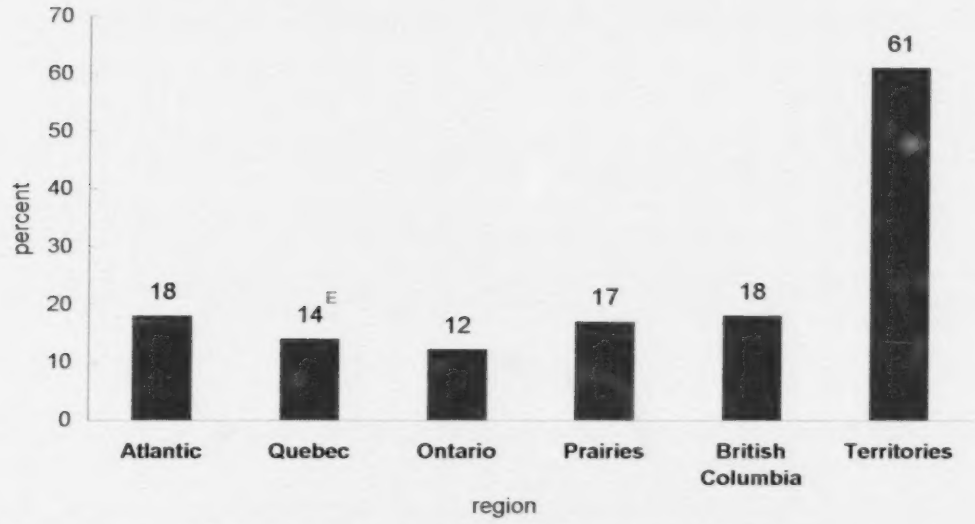
At home, about 12% of off-reserve First Nations children used their Aboriginal language "all" or "most of" the time. About 18% used it "some of the time", and about 39% "very seldom". Finally, about 28% of children who could speak and understand an Aboriginal language did not use their language at all at home.

Off-reserve First Nations children with registered Indian status were more likely than their non-status counterparts to use their Aboriginal language "some to all of the time" at home (34% versus 16%). Younger children were also more likely than older children to use their Aboriginal language at home (33% versus 26%).

At school, about 5% of off-reserve First Nations children used their Aboriginal language "all" or "most of" the time. About 14% used it "some of the time", and about 12% "very seldom". The majority (63%) of off-reserve First Nations children who could speak and understand an Aboriginal language did not use their language at all at school.

The proportion of off-reserve First Nations children using their Aboriginal language "some to all of the time" at school was higher among children living in rural (33%) than in urban (13%) areas. Off-reserve First Nations children with registered Indian status were also more likely than their non-status counterparts to use their Aboriginal language "some to all of the time" at school (21% versus 8%). The figure was also higher for younger than for older children (21% versus 16%). Finally, the Territories was the region where the use of Aboriginal languages at school was most common (61%) among First Nations children (see chart 7).

Chart 7
Percentage of off-reserve First Nations children aged 6 to 14 who use their Aboriginal language "some to all the time" at school, by region, 2006



Source: Statistics Canada, Aboriginal Peoples Survey, 2006, children and youth component

Which factors are associated with off-reserve First Nations children's perceived school achievement?

The previous sections provided a broad portrait of the school experiences among off-reserve First Nations children aged 6 to 14, as well as a description of some factors likely related with school success. We now turn to addressing a final question: which factors are associated with off-reserve First Nations children's perceived school achievement? Logistic regression analysis (see Textbox - Logistic regression analysis) was used to identify which factors were associated with doing "very well" or "well" at school, as perceived and reported by parents[30].

Similar to research on school achievement based on the general population, a number of factors were significantly associated with how well off-reserve First Nations children were doing at school, as perceived by their parents. These factors are shown with an asterisk in Table 1. Odds ratios from the column entitled "Odds ratio for full model" will be discussed. This column presents the odds that children with a certain characteristic will be doing "very well" or "well" at school relative to the odds for a reference group of children when all other variables in the analysis are held constant (see explanation of odds ratio in Textbox - Logistic regression analysis).

30. Objective measures of educational achievement, such as standardized tests scores or actual report cards, are not available from the 2006 APS and, therefore, could not be considered in this analysis. It should be kept in mind that parental ratings of their child's achievement may not be entirely independent of other perceptions regarding their child's school experiences.

Table 1
Logistic regression results predicting the odds of doing "very well or well" at school, off-reserve First Nations children aged 6 to 14

Factors		Odds ratio for single variable	Odds ratio for full model
Absence from school for 2 or more weeks in a row	Yes	0.4 ***	0.5 **
	No †	1.0	1.0
Preschool program attendance	Aboriginal children program	1.0	0.9
	Non-Aboriginal program	1.2 **	1.0
	Never attended any preschool progr	1.0	1.0
Presence of drugs and alcohol at school	Is a problem	0.7 ***	1.1
	Is not a problem †	1.0	1.0
Presence of violence at school	Is a problem	0.6 ***	0.9
	Is not a problem †	1.0	1.0
Satisfaction with school practices	Strongly satisfied	2.3 ***	2.0 ***
	Not strongly satisfied †	1.0	1.0
Importance of postsecondary education	Very important	1.8 ***	1.2
	Not important to fairly important †	1.0	1.0
Getting along with friends/classmates	Hardly any or no problems	2.4 ***	1.5 **
	Occasional to constant problems †	1.0	1.0
Getting along with teachers	Hardly any or no problems	3.7 ***	2.2 ***
	Occasional to constant problems †	1.0	1.0
Parental level of education	University	1.2	1.0
	College or trade/vocational	1.3 *	1.2
	Some postsecondary	1.3 *	1.2
	High school	1.2	1.1
	Did not complete high school †	1.0	1.0
Household income	Quintile 5	1.6 ***	1.3 *
	Quintile 4	1.1	0.9
	Quintile 3	1.2 *	1.2
	Quintile 2	1.0	1.1
	Quintile 1 †	1.0	1.0
Living arrangements	Two parent household	1.2 **	1.0
	One parent household †	1.0	1.0
Eating breakfast everyday	Yes	1.4 ***	1.0
	No †	1.0	1.0
Experienced being hungry	Yes	0.6 ***	1.0
	No †	1.0	1.0

Table 1
Logistic regression results predicting the odds of doing "very well or well" at school, off-reserve First Nations children aged 6 to 14 (continued)

Factors		Odds ratio for single variable	Odds ratio for full model
Mobility in the previous year	Residing at the same address	1.2 **	1.0
	Residing at a different address †	1.0	1.0
Parents attended residential school	Yes	0.7 ***	0.7 *
	No †	1.0	1.0
Activity limitations at school	Yes	0.5 ***	0.9
	No †	1.0	1.0
Learning disability	Yes	0.3 ***	0.5 ***
	No †	1.0	1.0
Attention deficit disorder	Yes	0.3 ***	0.6 **
	No †	1.0	1.0
Reading books everyday	Yes	1.8 ***	1.5 ***
	No †	1.0	1.0
Playing sports	At least once a week	1.5 ***	1.3 **
	Less than once a week †	1.0	1.0
Taking part in art/music	At least once a week	1.5 ***	1.2 *
	Less than once a week †	1.0	1.0
Volunteering in the community or school	At least once a week	1.3 ***	1.2
	Less than once a week †	1.0	1.0
Spending time with Elders	At least once a week	1.2 **	1.1
	Less than once a week †	1.0	1.0
Sex	Boy	0.6 ***	0.7 ***
	Girl †	1.0	1.0
Age group	11 to 14	0.6 ***	0.7 ***
	6 to 10 †	1.0	1.0

Notes:
The odds ratio for single variable indicates the effect of each factor on school achievement when analyzed individually. The odds ratio for full model indicates the effect of each factor on school achievement when all other variables in the analysis are held constant. Some factors that were found to have a significant effect on school achievement when analyzed individually lost their significance when all other variables in the analysis were held constant.
Odds ratios for Registered Indian status, area of residence, region, before/after school child care program attendance, taking part in clubs/groups, and knowledge of an Aboriginal language in the single variable models did not reach statistical significance (not shown). These factors were not included in the full model.
The full model is based on 4,971 off-reserve First Nations children (representing 77,674 children) for whom there were no missing value on any variables included in the model.
All models were calculated using bootstrap weights to obtain the correct variance estimates.

† Reference group.
* Statistically significant difference from the reference group ($p < .05$).
** Statistically significant difference from the reference group ($p < .01$).
*** Statistically significant difference from the reference group ($p < .001$).

Source: Statistics Canada, Aboriginal Peoples Survey 2006, children and youth component

Factors associated with higher perceived achievement at school

A number of factors were associated with doing "very well" or "well" at school among off-reserve First Nations children.

Getting along well (i.e., hardly any or no problems) with teachers, or with friends and classmates, was associated with higher school success. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children who got along well with their teachers were 2.2 times the odds for children who had occasional or constant problems. As well, the odds of doing "very well" or "well" at school for children who got along well with their friends and classmates were 1.5 times the odds for children who had occasional or constant problems.

Having parents who were strongly satisfied with school practices (such as providing information on the child's academic progress, attendance and behaviour) was associated with higher school success. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children whose parents were strongly satisfied with school practices were twice the odds for children whose parents were less satisfied.

Reading books everyday, playing sports at least once a week, and taking part in art or music activities at least once a week, were also associated with higher school success. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children who read books everyday were 1.5 times the odds for children who did not read everyday. As well, the odds of doing "very well" or "well" for children who played sports at least once a week were 1.3 times the odds for children who played sports less than once a week. Similarly, the odds of doing "very well" or "well" at school for children who took part in art or music activities at least once a week were 1.2 times the odds for children who engaged in these activities less than once a week.

Higher household income was also found to be associated with higher school success. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children who were in households at the highest household income range were 1.3 times the odds for children who were at the lowest range.

Factors associated with lower perceived achievement at school

A number of factors were associated with relatively lower perceived achievement at school among off-reserve First Nations children.

Having missed school for a period of 2 or more weeks in a row during the school year was associated with lower success at school. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children who had been absent for 2 or more weeks in a row during the school year were half (0.5) the odds for children who had not.

Having been diagnosed with a learning disability or with attention deficit disorder was also associated with lower success at school. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children who had been diagnosed with a learning disability were half (0.5) the odds for children who had not. As well, the odds of doing "very well" or "well" for children who had been diagnosed with attention deficit disorder were about half (0.6) the odds for children who had not.

Finally, having parents who attended residential schools was associated with lower success at school. All other factors being equal, the odds of doing "very well" or "well" at school for off-reserve First Nations children whose parents attended residential schools were 0.7 times the odds for children whose parents did not attend residential schools.

Supporting the descriptive findings, boys and older children were less likely to be reported as doing "very well" or "well" at school. All other factors being equal, the odds of doing "very well" or "well" at school for First Nations boys were 0.7 times the odds for girls. Similarly, the odds of doing "very well" or "well" at school for First Nations children aged 11 to 14 were 0.7 times the odds for children aged 6 to 10. No significant effects on school achievement emerged for Registered Indian status, area of residence, and region for off-reserve First Nations children. That is, even though off-reserve First Nations children with and without registered Indian status; living in urban versus rural areas; and from the different regions were reported to have different school experiences and characteristics, when holding constant other factors the effect of these experiences were not associated with their achievement at school, as reported by their parents.

Limitations

It is important to understand that the direction of the relationship between perceived school achievement and the factors under investigation is difficult to determine. To take one example, absences from school may result in lower achievement, but low school achievement can also lead to more absences from school. Results are best interpreted as highlighting correlations between variables.

Furthermore, school achievement is influenced by students' experiences over many years, whereas the APS captures these experiences as reported at a single point in time. For this reason, the cumulative effect of specific factors on how well off-reserve First Nations children were doing at school could not be analysed.

Lastly, this report did not thoroughly examine *all* the factors likely to be associated with how well off-reserve First Nations children were doing at school. As a beginning, this report selected certain key indicators based on the literature on school achievement, but the list is not exhaustive. For instance, factors such as crowding and poor housing conditions may be related to school outcomes. Through this initial snapshot of the school experiences of First Nations children living off reserve, it is hoped that organizations and researchers continue with further analysis of the data in order to explore other factors likely to be associated with school success.

Conclusion

This report provides a broad overview of the school experiences of off-reserve First Nations children aged 6 to 14, as well as an analysis of some factors likely to be associated with their success at school, as perceived and reported by their parents.

Descriptive analyses showed differences between the perceived achievement of off-reserve First Nations boys and girls, as well as between younger and older children. Regression analyses also highlighted a number of associations between school success and off-reserve First Nations children's school experiences, health, out-of-school activities, and family background. Future research on these topics could provide additional insights regarding potentially important areas for educational programs and policies.

Findings from this report revealed that overall, the factors that were associated with off-reserve First Nations children's achievement in the formal education system were similar to those observed in research based on the general population. For some of these factors, however, differences were observed for off-reserve First Nations children as compared to all Canadian children.

One factor specific to First Nations children, namely, whether or not they had parents who had been residential school students, was found to be statistically related to how well children were doing at school. About 12% of off-reserve First Nations children had parents who indicated in the 2006 APS that they had attended residential schools. When all other variables in the analysis were held constant, this group of children was less likely to be doing "very well" or "well" at school as compared to children whose parents had not attended residential schools. More research focusing on First Nations-specific factors is needed in order to broaden our knowledge.

Even though the educational profile of First Nations peoples living off reserve in Canada has generally improved over the past decade, their rates of high school completion continue to be lower than the total Canadian population. Given that many researchers view the path toward dropping out of school as beginning in the early years, there is a need to look at the early school experiences of children in order to understand the lower educational profile of First Nations people living off reserve. This report provides new data on the early educational experiences of First Nations children aged 6 to 14 living off reserve in Canada, and offers insights into some factors associated with their educational outcomes.

Registered Indian Status

The 2006 Aboriginal People Survey asked parents/guardians, "Is <child's name> a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada?"

The *Indian Act* sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources.

Registered Indians or "status Indians" are people who are entitled to have their names included on the Indian Register, an official list maintained by the federal government. Certain criteria determine who can be registered as a status Indian. Only Registered Indians are recognized as Indians under the *Indian Act*, which defines an Indian as 'a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian.' Status Indians are entitled to certain rights and benefits under the law.

Generally speaking, Treaty Indians are persons who are registered under the *Indian Act* and can prove descent from a band that signed a treaty.

For more information, including the inheritance rules regarding the passing of Registered Indian status from parents to children, see the Indian and Northern Affairs Canada website at:

http://www.ainc-inac.gc.ca/pr/pub/wf/index_E.html.

Logistic regression analysis

Logistic regression analysis allows answering questions such as: Can an outcome (e.g., school achievement) be explained by a set of variables? Which specific variables are associated with the outcome? Caution must be exercised when interpreting results from logistic regression analysis, especially when using a cross-sectional dataset like the APS. That is, the exact nature or direction of the relationship between the variables under investigation is difficult to determine. Results are best interpreted as highlighting correlations between variables.

A model has been developed to illustrate the relationship between perceived school achievement and a number of factors or characteristics among off-reserve First Nations children. The logistic regression computes odds ratios for each factor in the model. Odds ratios are used to assess whether children with a specific characteristic are more or less likely to be doing 'very well' or 'well' at school than those in another group (the reference group).

What is an odds ratio?

To help understand what an odds ratio means and how to interpret it, the following example using hypothetical numbers might be useful. If there were 20 boys who were doing "very well" or "well" at school and 80 who did not, then the odds of doing "very well" or "well" at school (or the probability of doing very well or well divided by the probability of not doing very well or well) are 20÷80=0.25. This implies that for every 100 boys who do not achieve "very well" or "well" at school, there are 25 who do achieve "very well" or "well".

An odds ratio expands on this concept by measuring the strength of association between two variables. For example, the odds ratio could compare the odds of doing "very well" or "well" at school for boys to the odds for girls. So if 40 girls were doing "very well" or "well" and 60 didn't, the odds of girls doing "very well" or "well" at school is 40÷60=0.67. Returning to the example for boys, the odds ratio of boys doing "very well" or "well" at school relative to girls is 0.25÷0.67 = 0.37.

The value of an odds ratio can range from zero to infinity. An odds ratio of 1 means there is no association between gender and doing "very well" or "well" at school. An odds ratio greater than 1 would mean that boys are more likely to do "very well" or "well" at school than girls. When the odds ratio is less than 1, as is the case in our example (i.e., 0.37), this means that boys are less likely than girls to do "very well" or "well" at school. In other words, the odds of doing "very well" or "well" at school for boys is 0.37 times the odds of doing "very well" or "well" at school for girls. In this example, the odds ratio is interpretable as a measure of the size of the effect of gender on school achievement (or a measure of the strength of association between gender and school achievement). That is, the closer the odds ratio is to 1, the smaller the effect of gender on school achievement; the farther the odds ratio is from 1, the stronger the effect.

Table 1 presents results for the logistic regression analysis. It presents the odds that a group of children with a certain characteristic will be doing "very well" or "well" at school relative to the odds that a bench mark (or reference) group of children will be doing "very well" or "well" at school (odds ratio). The reference group is shown with the symbol "†" for each characteristic.

Two sets of odds ratio were computed. The odds ratios in the column entitled "Odds ratio for single variable" indicate the effect of each factor on perceived school achievement when these factors are analyzed individually. The odds ratios in the column entitled "Odds ratio for full model" indicate the effect of each factor on perceived school achievement when all other variables in the analysis are held constant. Some factors that were found to have a significant effect on school achievement when analyzed individually lost their significance when all other variables in the analysis were held constant. Odds ratios from the full model are discussed in the text of this report.

Description of variables

The outcome variable, perceived school achievement, was the parental rating of their child's performance at school this year (H11). A dichotomous school achievement variable was created (0 = 'very poorly to average', 1 = 'very well or well').

The factors included in the analysis, with the corresponding question number in parenthesis, and their categories were as follows:

Absence from school for 2 or more weeks in a row (H12):
- Yes
- No (reference group)

Early childhood development or preschool program attendance (H1). Children could be in one of the following three groups:
- Attended a program designed for Aboriginal children
- Attended a non-Aboriginal program
- Never attended any preschool program (reference group)

Before/after school child care program attendance (H9):
- Yes
- No (reference group)

Perceived presence of drugs and alcohol at school (H10E). Children could be in one of the following two groups:
- Having parents who 'strongly agreed' or 'agreed' that the presence of drugs and alcohol at school was a problem
- Having parents who 'strongly disagreed' or 'disagreed' that the presence of drugs and alcohol at school was a problem (reference group)

Perceived presence of violence at school (H10F). Children could be in one of the following two groups:
- Having parents who 'strongly agreed' or 'agreed' that the presence of violence at school was a problem
- Having parents who 'strongly disagreed' or 'disagreed' that the presence of violence at school was a problem (reference group)

Satisfaction with school practices (H10A, H10B, H10C, H10D, H10G, H10H, H10I, H10J, H10K)[31]. Children could be in one of the following two groups:
- Having parents who were 'strongly' satisfied with school practices
- Having parents who were 'strongly dissatisfied' to 'satisfied' with school practices (reference group)

Importance of postsecondary education (H13B). Children could be in one of the following two groups:
- Having parents who thought it was 'very important' that their child gets more education after high school
- Having parents who thought it was 'not important' to 'fairly important' (reference group)

Getting along with friends/classmates (I4). Children could be in one of the following two groups:
- Having 'hardly any' or 'no problems' with friends/classmates
- Having 'occasional' to 'constant problems' (reference group)

31. A satisfaction score was created by averaging the nine statements (H10A, H10B, H10C, H10D, H10G, H10H, H10I, H10J, H10K) measuring the extent to which parents "strongly agreed" (value of 1), "agreed" (value of 2), "disagreed" (value of 3), or "strongly disagreed" (value of 4) that: their child's school provided enough information on their academic progress, attendance, and behaviour; were satisfied with the level of discipline, the quality of teaching, and the availability of extracurricular activities at school, and with how school was preparing their child to make choices about the future; thought that their child was challenged to work at his/her full potential, and that their child's school had high academic standards. This score, ranging from 1 to 4 (average of nine values ranging from 1 to 4), was then dichotomized and labelled into 'strongly agree' if its value was between 1 and 1.5 (excluding 1.5) (meaning parents were strongly satisfied), and 'strongly disagree to agree' if its value was greater than or equal to 1.5 (meaning parents were strongly dissatisfied to satisfied).

Getting along with teachers (I5). Children could be in one of the following two groups:
- Having 'hardly any' or 'no problems' with teachers
- Having 'occasional' to 'constant problems' (reference group)

Parental level of education (K5). Children could be in one of the following five groups:
- Having a parent with a university degree
- Having a parent with a completed college or trade/vocational certificate or degree
- Having a parent with some postsecondary education
- Having a parent with a high school diploma
- Having a parent who have not completed high school (reference group)

Household income (from 2006 Census)[32]. Children could be in one of the following five groups:
- Quintile 5: $85,248 and up
- Quintile 4: $56,103 to $85,247
- Quintile 3: $37,003 to $56,102
- Quintile 2: $22,944 to $37,002
- Quintile 1: $22,943 or less (reference group)

Living arrangements (K10)[33]. Children could be in one of the following two groups:
- Living in a two-parent household
- Living in a one-parent household (reference group)

Eating breakfast everyday (G1):
- Yes
- No (reference group)

Having experienced being hungry because the family had run out of food or money to buy food (G3):
- Yes
- No (reference group)

Mobility in the previous year (from 2006 Census). Children could be in one of the following two groups:
- Residing at the same address as the year before
- Residing at a different address (reference group)

Having parents (one or both) who attended residential school (derived from K6 and K7E):
- Yes
- No (reference group)

Having a condition that limits one's school activities (D2B):
- Yes
- No (reference group)

Having been diagnosed with a learning disability (D3L):
- Yes
- No (reference group)

Having been diagnosed with ADD/ADHD (D3O):
- Yes
- No (reference group)

32. Household incomes were ranked from lowest to highest and then divided into five groups of equal numbers of units, called quintiles. Quintiles were created based on the weighted distribution of household incomes of the off-reserve First Nations population under consideration in this report (ages 6 to 14).

33. The 2006 APS asked respondents to include step parents, adoptive parents, foster parents, legal guardians, etc. This question is slightly different than the question used in the Census, which may result in the APS yielding higher rates of children living in a two-parent household as compared to the Census.

Reading books (I3). Children could be in one of the following two groups:
- Reading books 'everyday'
- Reading books 'a few times a week' to 'never' (reference group)

Playing sports (I1A), taking part in art/music (I1B), taking part in clubs/groups (I1C), volunteering in the community or school (I1D), spending time with Elders (I1F). For each of these activities, children could be in one of the following two groups:
- Participating in the activity '1 to 4 or more times per week'
- Participating in the activity 'less than once a week' or 'never' (reference group)

Knowledge of an Aboriginal language (derived from J1 and J5). Children could be in one of the following three groups[34]:
- Able to speak and understand an Aboriginal language
- Able to understand (even if only a few words) but not speak an Aboriginal language
- Not able to speak nor understand an Aboriginal language (reference group)

Sex:
- Boy
- Girl (reference group)

Age group:
- 11 to 14
- 6 to 10 (reference group)

Registered Indian status:
- Yes
- No (reference group)

Area of residence:
- Rural
- Urban (reference group)

Region:
- Atlantic
- Quebec
- Ontario (reference group)
- Prairies
- British Columbia
- Territories

34. High correlations between Aboriginal language knowledge and Aboriginal language use prevented the inclusion of Aboriginal language use in the logistic regression model.

References

Aboriginal Healing Foundation (2002). The Healing Has Begun: An Operational Update from the Aboriginal Healing Foundation. Aboriginal Healing Foundation, Ottawa.

Alexander, K.L., Entwistle, D.R., and Horsey, C.S. (1997). From First Grade Forward: Early Foundations of High School Dropout. Sociology of Education, Vol. 70, No. 2, pp. 87-107.

Astone, N.M. and McLanahan, S.S. (1991). Family Structure, Parental Practices and High School Completion. American Sociological Review, Vol. 56, No. 3, pp. 309-320.

Bonneau, C., Ee, B., and Lauzon, J. (2006). First Nations Learners and Extracurricular Activities: Barriers and Bridges to Participation. Educational Insights, Vol. 10, No. 1. [Available: http://www.ccfi.educ.ubc.ca/publication/insights/v10n01/articles/bonneau.html]

Bougie, E., Wright, S.C., and Taylor, D.M. (2003). Early Heritage-language Education and the Abrupt Shift to a Dominant-language Classroom: Impact on the Personal and Collective Esteem of Inuit Children in Arctic Québec. International Journal of Bilingual Education and Bilingualism, Vol. 6, No. 5, pp. 349-373.

Brady, P. (1996). Native Dropouts and Non-Native dropouts in Canada: Two Solitudes or a Solitude Shared? Journal of American Indian Education, Vol. 35, No. 2, pp. 10-20.

Canadian Council on Learning (2007). Redefining How Success is Measured in First Nations, Inuit and Métis Learning. Report on Learning in Canada 2007, Ottawa, 45 p.

Canadian Heritage (2005). Towards a new beginning: A foundation report for a strategy to revitalize First Nation, Inuit and Métis languages and cultures. Report to the Minister of Canadian Heritage by the Task Force on Aboriginal languages and cultures. Ottawa. Catalogue No. CH4-96/2005.

Chandler, M. J. (2006). Cultural Continuity in the Face of Radical Social Change: Language Preservation as a Protective Factor against Suicide in First Nations Youth. University of British Columbia. Paper presented at Raising our Voices, Language Conference, Cornwall, Ontario, 15 August 2006.

Che, J. and Chen, J. (2001). Food insecurity in Canadian households. Health Reports, Vol. 12, No. 4, Statistics Canada, Catalogue 82-003, pp. 11-22.

Cleveland, G. and Krashinsky, M. (2003). Facts and fantasy: Eight myths about early childhood education and care. Childcare Resource and Research Unit, University of Toronto.

Cooks, C. and Willms, J.D. (2002). Balancing work and family life. In J.D. Willms (ed.), Vulnerable Children. Edmonton: University of Alberta Press and Human Resources Development Canada, pp. 183-197.

Croninger, R.G. & and Lee, V.E. (2001). Social capital and dropping out of high schools: Benefits to at-risk students of teachers' support and guidance. Teachers College Press, Vol. 103, No. 4, pp.548-581.

Eccles, J.S. (1999). The Development of Children Ages 6 to 14. The Future of Children, Vol. 9, No. 2, pp. 30-44.

Ensminger, M.E. and Slusarcick, A.L. (1992). Paths to High School Graduation or Dropout: A Longitudinal Study of a First-Grade Cohort. Sociology of Education, Vol. 65, No. 2, pp. 95-113.

Garnier, H.E., Stein, J.A., and Jacobs, J.K. (1997). The Process of Dropping out of High School: A 19-Year Perspective. American Educational Research Journal, Vol. 34, No. 2, pp. 395-419.

Hull, J. (2000). Aboriginal Post-Secondary Education and Labour Market Outcomes. Ottawa: Indian and Northern Affairs Canada, Research and Analysis Directorate.

Indian and Northern Affairs Canada (2008a). "Revised Northern Food Basket". http://www.ainc-inac.gc.ca/nth/fon/fc/hpsr0607-eng.asp

Indian and Northern Affairs Canada (2008b). "Backgrounder – Indian Residential Schools". http://www.ainc-inac.gc.ca/ai/rqpi/info/nwz/2008/20080425a_is-eng.asp

Lee, V.E. and Bryk, A.S. (1989). A Multilevel Model of the Social Distribution of High School Achievement. Sociology of Education, Vol. 62, No. 3, pp. 172-192.

Lee, V.E. and Burkham, D.T. (2003). Dropping out of High School: The Role of School Organization and Structure. American Educational Research Journal, Vol. 40, No. 2, pp. 353-393.

Lee, V.E. and Smith, J.B. (1993). Effects of School Restructuring on the Achievement and Engagement of Middle-grade Students. Sociology of Education, Vol. 66, No. 3, pp. 164-187.

McNeal, R.B. (1995). Extracurricular Activities and High School Dropouts. Sociology of Education, Vol. 68, No. 1, pp. 62-80.

Norris, M.J. (2007). Aboriginal languages in Canada: Emerging trends and perspectives on second language acquisition. Canadian Social Trends, Statistics Canada, Catalogue No. 11-008, pp. 19-27.

Palacio-Quintin, E. (2000). Les services de garde et le développement de l'enfant. ISUMA – Canadian Journal of Policy Research / Revue canadienne de recherche sur les politiques, Vol. 1, No. 2, pp. 25-30.

Pastor, P.N. and Reuben, C.A. (2008). Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004–2006. National Center for Health Statistics. Vital Health Stat, Vol. 10, No. 237.

Rumberger, R.W. (1995). Dropping out of Middle School: A Multilevel Analysis of Students and Schools. American Educational Research Journal, Vol. 32, No. 3, pp. 583-625.

Rumberger, R.W. and Larson, K.A. (1998). Student Mobility and the Increased Risk of High School Dropout. American Journal of Education, Vol. 107, No. 1, pp. 1-35.

Sénéchal, M. and LeFevre, J-A (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. Child Development, Vol. 73, pp. 445-460.

Statistics Canada, 2008. Participation and Activity Limitation Survey 2006: A Profile of Education for Children with Disabilities in Canada. Ottawa. Catalogue no. 89-628-X no. 004.

Turcotte, M. and Zhao, J. (2004). Well-being of off-reserve Aboriginal children. Canadian Social Trends, Statistics Canada, Catalogue No. 11-008, Winter 2004, pp. 22-27.

Where are the Children (2008). "Intergenerational impacts". http://www.wherearethechildren.ca/en/impacts.html

Wright, S.C. and Taylor, D.M. (1995). Identity and the language in the classroom: Investigating the impact of heritage versus second language instruction on personal and collective self-esteem. Journal of Educational Psychology, Vol. 87, pp. 241-252.